STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0000159
Owner:	Holcim (US) Inc.
Address:	P.O. Box 122, Dundee, MI 48131
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Holcim (US) Inc. – Clarksville Plant
Address:	14738 Highway 79 North, Clarksville, MO 63336
Legal Description:	Secs. 7 and 18, T53N, R1E, Pike County
Receiving Stream:	Outfall #002 – Calumet Creek (P) All Other Outfalls – Mississippi River (P)
First Classified Stream and ID:	Outfall #002 – Calumet Creek (P) (0018) All Other Outfalls - Mississippi River (P) MO-0001-1998
USGS Basin & Sub-watershed No.:	07110004-110003

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

January 21, 2005
Effective Date

Michael D. Wells
Mike D. Wells, Acting Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

January 20, 2010
Expiration Date

Jim Hull, Director of Staff, Clean Water Commission

FACILITY DESCRIPTION (continued)

Outfall #001 - Storm water runoff/non-contact cooling water/water treatment plant/six settling basins (series operated)–SIC #3241
Actual flow is 1.85 MGD.
Design flow is 4.0 MGD actual flow is 2.5 MGD.
Stormwater settling basin solids and water plant solids landfilled.
This outfall discharges to Outfall #006.

Outfall #002 - Storm water runoff/pumping/two settling basins (series operated)-SIC #1422
Actual Flow is 0.33 MGD, Design flow is 3.0 MGD.
Stormwater settling basin solids landfilled.

Outfall #003 - An extended aeration treatment plant/sludge landfill–SIC #3241
Design population equivalent is 500.
Actual flow is 0.010 MGD.
Design flow is 0.050 MGD.
Design sludge production is 10.5 dry tons/year.

Outfall #004 – Was an extended aeration treatment plant
Flow eliminated by septic system.

Outfall #005 - Collection Sump/Sand Filter–SIC #3241
Storm water runoff.
Flow is dependent upon precipitation.
Stormwater settling basin solids landfilled.

Outfall #006 - Stormwater runoff from plant area/shipping area, Highway 79, and Railroad tracks–SIC Code #3241
Outfall #003 and #004/settling basin/flow is dependent upon precipitation.
Stormwater settling basin, solids landfilled.

Outfall #007 - Stormwater from shipping facility - SIC #3241

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001 - stormwater, non-contact cooling water, equipment wash water						
Flow	MGD	*		*	once/month	24 hr. total
Total Suspended Solids	mg/L	*		*	once/month	grab
Oil and Grease	mg/L	15		10	once/month	grab
pH – Units	SU	***		***	once/month	grab
Total Residual Chlorine	mg/L	0.1		0.1	once/month	grab
Chemical Oxygen Demand	mg/L	*		*	once/month	grab
Outfall #002 – stormwater						
Flow	MGD	*		*	once/month	24 hr. total
pH – Units (Note 1)	SU	***		***	once/month	grab
Oil and Grease	mg/L	15		10	once/month	grab
Total Suspended Solids (Note 1)	mg/L	50		50	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE _April 28, 2005_.						
Total Toxic Organics (Note 1)	mg/L	*		*	once/year	grab
Outfall #003 - extended aeration treatment plant						
Flow	MGD	*		*	once/quarter****	24 hr. total
Biochemical Oxygen Demand$_5$	mg/L		45	30	once/quarter****	Note 4
Total Suspended Solids	mg/L		45	30	once/quarter****	Note 4
pH – Units	SU	***		***	once/quarter****	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE _October 28, 2005_. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED _October 1, 1980_, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #006 - multiple sources						
Flow	MGD	*		*	once/year	24 hr. estimate
Intake Total Suspended Solids (Note 2)	mg/L	*		*	once/year	grab
Discharge Total Suspended Solids (Note 2)	mg/L	*		*	once/year	grab
Net Total Suspended Solids (Note 2)	mg/L	50		50	once/year	grab
pH - Units	SU	***		***	once/year	grab
Total Toxic Organics (Note 3)	mg/L	*		*	once/year	grab
Total Residual Chlorine	mg/L	0.1		0.1	once/year	grab
Oil and Grease	mg/L	15		10	once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE _October 28, 2005_.						
Outfalls #005 and #007 – stormwater						
Flow	MGD	*		*	once/quarter	24 hr. estimate
Total Suspended Solids (Note 1)	mg/L	50		50	once/quarter****	grab
pH – Units (Note 1)	SU	***		***	once/quarter****	grab
Oil and Grease	mg/L	15		10	once/quarter****	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE _October 28, 2005_.						
Mississippi River Intake Monitoring Point Total Suspended Solids (Note 2)	mg/L	*		*	once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE _October 28, 2005_. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

B. STANDARD CONDITIONS

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.
** This facility is required to meet a removal efficiency of 85% or more.
*** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
**** Sample once per quarter in the months of March, June, September, and December.

Note 1 - If flow is due to a 10-year, 24-hour rainfall event (5.0 inches in Pike County), pH and Total Suspended Solids limits are waived. All other limits are in effect at all times.

Note 2 - Total Suspended Solids sampling in river is for Outfall #006 net limits calculation. Sample must be taken at same time as Outfall #006 sample.

Note 3 - See List on Page 6.

Note 4 – A composite sample made up from a minimum of four grab samples collected within a 24 hour period with a minimum of two hours between each grab sample.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 3 - Total Toxic Organics

Acenaphthene
Acrolein
Acrylonitrile
Benzene
Benzidine
Carbon Tetrachloride (tetrachloromethane)
Chlorobenzene
1,2,4-trichlorobenzene
Hexachlorobenzene
1,2-dichloroethane
1,1,1-trichloroethane
Hexachloroethane
1,1-dichloroethane
1,1,2-trichloroethane
1,1,2,2-tetrachloroethane
Chloroethane
Bis (2-chloroethyl) ether
2-chloroethyl vinyl ether
N-nitrosodi-n-propylamine
Pentachlorophenol
Phenol
Bis (2-ethylhexyl) phthalate
Butyl benzyl phthalate
Di-n-butyl phthalate

Di-n-octyl phthalate
Diethyl phthalate
Dimethyl phthalate
1,2-benzanthracene (benzo(a)anthracene)
Benzo(a)pyrene (3,4-benzopyrene)
3,4-benzofluoranthene (benzo(b)fluoranthene)
11,12-benzofluoranthene (benzo(k)fluoranthene)
Chrysene
Anthracene
1,12-benzoperylene (benzo(ghi)perylene)
Fluorene
2-chloronaphthalene
2,4,6-trichlorophenol
Parachlorometa cresol
Chloroform (trichloromethane)
2-chlorophenol
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichorobenzene
3,3-dichlorobenzidine
1,1-dichloroethylene
1,2-trans-dichloroethylene
2,4-dichlorophenol
1,2-dichloropropane (1,3-dichloropropane)
2,4-dimethylphenol
2,4-dinitrotoluene
2,6-dinitrotoluene
1,2-diphenylhydrazine
Ethylbenzene
Fluoranthene
4-chlorophenyl phenyl ether
4-bromophenyl phenyl ether
Bis (2-chloroisopropyl) ether
Bis (2-chloroethoxy) methane
Methylene Chloride (dichloromethane)
Methyl Chloride (chloromethane)
Methyl bromide (bromomethane)
Bromoform (tribromomethane)
Dichlorobromomethane
Chlorodibromemethane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
2-nitrophenol
4-nitrophenol
2,4-dinitrophenol
4,6-dintro-o-cresol
N-nitrosodimethylamine
N-nitrosodiphenylamine
Phenanthrene
1,2,5,6-dibenzanthracene (dibenzo(a,h)anthracene)
Indeno (1,2,3-cd) pyrene
(2,3-o-phenylene pyrene)
Pyrene
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl Chloride (chloroethylene)
Aldrin
Dieldrin
Chlordane (technical mixture and metabolites)
4,4-DDT
4,4-DDE (p,p-DDX)
4,4-DDD (p,p-TDE)
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide (BHC hexachlorocyclohexane)
Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC (PCB polychlorinated biphenyls)
PCB-1242 (Arochlor 1242)
PCB-1254 (Arochlor 1254)
PCB-1221 (Arochlor 1221)
PCB-1232 (Arochlor 1232)
PCB-1248 (Arochlor 1248)
PCB-1260 (Arochlor 1260)
PCB-1016 (Arochlor 1016)
Toxaphene

C. SPECIAL CONDITIONS

1. This permit may be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C), and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
   (a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
   (b) Controls any pollutant not limited in the permit.
   The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

2. All outfalls must be clearly marked in the field.

3. Permittee will cease discharge by connection to area-wide wastewater treatment system within 90 days of notice of its availability.

4. Changes in Discharges of Toxic Substances
   The permittee shall notify the Director as soon as it knows or has reason to believe:
   (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
      (1) One hundred micrograms per liter (100 ug/L);
      (2) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
      (4) The level established in Part A of the permit by the Director.
   (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

5. Report as no-discharge when a discharge does not occur during the report period.

6. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
   (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
   (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
   (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
   (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
   (e) There shall be no significant human health hazard from incidental contact with the water;
   (f) There shall be no acute toxicity to livestock or wildlife watering;
   (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
   (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
   (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
   (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon cleanout and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.